

=> s eotaxin

2 FILES SEARCHED...

L1 1812 EOTAXIN

=> s l1 (5a) (receptor#)

2 FILES SEARCHED...

L2 299 L1 (5A) (RECEPTOR#)

=> s l2 (P) (nucleic acid# or DNA or cDNA or polynucleotide#)

2 FILES SEARCHED...

L3 30 L2 (P) (NUCLEIC ACID# OR DNA OR CDNA OR POLYNUCLEOTIDE#)

=>

=> d l3 1-30 bib ab

L3 ANSWER 1 OF 30 MEDLINE

AN 2000507192 MEDLINE

DN 20512498 PubMed ID: 11056090

TI Overexpression of eotaxin and the CCR3 receptor in human atherosclerosis:

using genomic technology to identify a potential novel pathway of vascular inflammation.

AU Haley K J; Lilly C M; Yang J H; Feng Y; Kennedy S P; Turi T G; Thompson J

F; Sukhova G H; Libby P; Lee R T

CS Respiratory Division, Department of Medicine, Brigham and Women's

Hospital, Harvard Medical School, Boston, MA 02115, USA.

NC HL-56985 (NHLBI)

HL-61824 (NHLBI)

SO CIRCULATION, (2000 Oct 31) 102 (18) 2185-9.

Journal code: 0147763. ISSN: 1524-4539.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200011

ED Entered STN: 20010322

Last Updated on STN: 20010521

Entered Medline: 20001121

AB BACKGROUND: Unstable atherosclerotic lesions typically have an abundant

inflammatory cell infiltrate, including activated T cells, macrophages,

and mast cells, which may decrease plaque stability. The pathophysiology

of inflammatory cell recruitment and activation in the human atheroma is

incompletely described. METHODS AND RESULTS: We hypothesized that

differential gene expression with \*\*\*DNA\*\*\* microarray technology

would identify new genes that may participate in vascular inflammation.

RNA isolated from cultured human aortic smooth muscle cells treated with

tumor necrosis factor-alpha (TNF-alpha) was examined with a \*\*\*DNA\*\*\*

microarray with 8600 genes. This experiment and subsequent Northern

analyses demonstrated marked increases in steady-state eotaxin mRNA (>20

fold), a chemokine initially described as a chemotactic factor for eosinophils. Because eosinophils are rarely present in human atherosclerosis, we then studied tissue samples from 7 normal and 14

atherosclerotic arteries. Immunohistochemical analysis demonstrated

overexpression of \*\*\*eotaxin\*\*\* protein and its \*\*\*receptor\*\*\*,

CCR3, in the human atheroma, with negligible expression in normal vessels.

Eotaxin was predominantly located in smooth muscle cells. The CCR3

receptor was localized primarily to macrophage-rich regions as defined by

immunopositivity for CD 68; a minority of mast cells also demonstrated

immunopositivity for the CCR3 \*\*\*receptor\*\*\*.

CONCLUSIONS:

\*\*\*Eotaxin\*\*\* and its \*\*\*receptor\*\*\*, CCR3, are overexpressed in

human atherosclerosis, suggesting that eotaxin participates in vascular

inflammation. These data demonstrate how genomic differential expression

technology can identify novel genes that may participate in the stability

of atherosclerotic lesions.

L3 ANSWER 2 OF 30 MEDLINE

AN 1999049845 MEDLINE

DN 99049845 PubMed ID: 9834099

TI Cloning and characterization of the guinea pig eosinophil eotaxin receptor, C-C chemokine receptor-3: blockade using a monoclonal

antibody

in vivo.

AU Sabroe I; Conroy D M; Gerard N P; Li Y; Collins P D; Post T W; Jose P J;

Williams T J; Gerard C J; Ponath P D

CS Biomedical Sciences Division, Imperial College School of Medicine, London,

United Kingdom.

SO JOURNAL OF IMMUNOLOGY, (1998 Dec 1) 161 (11) 6139-47.

Journal code: 2985117R. ISSN: 0022-1767.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

OS GENBANK-AF060698

EM 199812

ED Entered STN: 19990115

Last Updated on STN: 19990115

Entered Medline: 19981221

AB Certain C-C chemokines, signaling via the \*\*\*eotaxin\*\*\* \*\*\*receptor\*\*\* C-C chemokine \*\*\*receptor\*\*\* -3 (CCR3),

are thought to be central mediators of eosinophil accumulation in allergic inflammation.

To investigate the role of CCR3 in vivo, we cloned the guinea pig \*\*\*eotaxin\*\*\* \*\*\*receptor\*\*\* (guinea pig CCR3) from a

genomic \*\*\*DNA\*\*\* library. We isolated a single-exon open reading frame coding

for a 358-amino acid chemokine receptor protein with 67 and 69% homology

to human and murine CCR3, respectively. When expressed in stable

transfectants, this \*\*\*receptor\*\*\* bound 125I-labeled guinea pig

\*\*\*eotaxin\*\*\*, 125I-labeled human monocyte chemotactic protein-3, and

125I-labeled human RANTES. In chemotaxis assays, guinea pig CCR3 transfectants responded only to guinea pig eotaxin, with a maximal effect at 100 nM. mAbs were raised that bound selectively to both guinea pig CCR3 transfectants and guinea pig eosinophils. One of these mAbs, 2A8, blocked both ligand binding to transfectants and their chemotaxis in response to eotaxin. The Ab also inhibited chemotaxis and the elevation of cytosolic calcium in guinea pig eosinophils in response to eotaxin. F(ab')<sub>2</sub> fragments of 2A8 were prepared that retained the ability to inhibit eosinophil calcium responses to eotaxin. Pretreatment of (111)In-labeled eosinophils in vitro with F(ab')<sub>2</sub> 2A8 selectively inhibited their accumulation in response to eotaxin in vivo. These data demonstrate that functional blockade of eosinophil chemokine receptors can be achieved in vivo and provide further support for the development of novel anti-inflammatory drugs targeting eosinophil recruitment through chemokine receptor antagonism.

L3 ANSWER 3 OF 30 MEDLINE

AN 1998143226 MEDLINE

DN 98143226 PubMed ID: 9480044

TI Functional expression of the eotaxin receptor CCR3 in T lymphocytes

co-localizing with eosinophils.

AU Gerber B O; Zanni M P; Uguccioni M; Loetscher M; Mackay C R; Pichler W J;

Yawalkar N; Baggiolini M; Moser B

CS Theodor Kocher Institute, University of Bern, Switzerland.

SO CURRENT BIOLOGY, (1997 Nov 1) 7 (11) 836-43.

Journal code: 9107782. ISSN: 0960-9822.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199802

ED Entered STN: 19980306

Last Updated on STN: 19980306

Entered Medline: 19980225

AB BACKGROUND: The chemokine eotaxin is produced at sites of allergic inflammation, binds selectively to the chemokine receptor CCR3 and

attracts eosinophil and basophil leukocytes, which express high numbers of

this \*\*\*receptor\*\*\*. Responses of T lymphocytes to \*\*\*eotaxin\*\*\*

have not been reported so far. We have investigated the expression of CCR3

in T lymphocytes and analysed the properties and in vivo distribution of T

lymphocytes expressing this receptor. RESULTS: In search of chemokine

receptors with selective expression in T lymphocytes, we have isolated

multiple complementary DNAs (cDNAs) encoding CCR3 from a human CD4+ T-cell

\*\*\*cDNA\*\*\* library. T-lymphocyte clones with selectivities for protein

and non-protein antigens were analysed for expression of CCR3 and

production of Th1- and Th2-type cytokines. Of 13 clones with surface CCR3,

nine secreted enhanced levels of interleukin-4 and/or

interleukin-5,

indicating that CCR3 predominates in Th2-type lymphocytes.

CCR3+ T

lymphocytes readily migrated in response to eotaxin, and showed the

characteristic changes in cytosolic free calcium. Immunostaining of

contact dermatitis, nasal polyp and ulcerative colitis tissue showed that

CCR3+ T lymphocytes are recruited together with eosinophils and, as

assessed by flow cytometry, a large proportion of CD3+ cells extracted

from the inflamed skin tissue were CCR3+. By contrast, CCR3+ T lymphocytes

were absent from tissues that lack eosinophils, as demonstrated for normal

skin and rheumatoid arthritis synovium. CONCLUSIONS: We show that T

lymphocytes co-localizing with eosinophils at sites of allergic inflammation express CCR3, suggesting that eotaxin/CCR3

represents a novel mechanism of T-lymphocyte recruitment. These cells are essential in

allergic inflammation, as mice lacking mature T lymphocytes were

insensitive to allergen challenge. Surface CCR3 may mark a subset of T

lymphocytes that induce eosinophil mobilization and activation through

local production of Th2-type cytokines.

L3 ANSWER 4 OF 30 MEDLINE

AN 97258609 MEDLINE

DN 97258609 PubMed ID: 9104803

TI Molecular and functional characterization of two novel human C-C

chemokines as inhibitors of two distinct classes of myeloid progenitors.

AU Patel V P; Kreider B L; Li Y; Li H; Leung K; Salcedo T; Nardelli B;

Pippalla V; Gentz S; Thotakura R; Parmelee D; Gentz R; Garotta G

CS Department of Cell Biology, Human Genome Sciences, Inc., Rockville,

Maryland 20850, USA.

SO JOURNAL OF EXPERIMENTAL MEDICINE, (1997 Apr 7) 185 (7) 1163-72.

Journal code: 2985109R. ISSN: 0022-1007.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-U85767; GENBANK-U85768

EM 199705

ED Entered STN: 19970523

Last Updated on STN: 19970523

Entered Medline: 19970514

AB Two novel human beta-chemokines, Ck beta-8 or myeloid progenitor

inhibitory factor 1 (MPIF-1), and Ck beta-6 or MPIF-2, were discovered as

part of a large scale \*\*\*cDNA\*\*\* sequencing effort. The MPIF-1 and

MPIF-2 cDNAs were isolated from aortic endothelium and activated monocyte

libraries, respectively. Both of the cDNAs were cloned into a baculovirus

vector and expressed in insect cells. The mature recombinant MPIF-1

protein consists of 99 amino acids and is most homologous to

macrophage  
inflammatory protein (MIP)-1alpha, showing 51% identity. It displays chemotactic activity on resting T lymphocytes and monocytes, a minimal but significant activity on neutrophils, and is negative on activated T lymphocytes. MIPF-1 is also a potent suppressor of bone marrow low proliferative potential colony-forming cells, a committed progenitor that gives rise to granulocyte and monocyte lineages. The mature recombinant MIPF-2 has 93 amino acid residues and shows 39 and 42% identity with monocyte chemoattractant protein (MCP)-3 and MIP-1alpha, respectively. It displays chemotactic activity on resting T lymphocytes, a minimal activity on neutrophils, and is negative on monocytes and activated T lymphocytes. On eosinophils, MIPF-2 produces a transient rise of cytosolic Ca2+ and uses the \*\*\*receptor\*\*\* for \*\*\*eotaxin\*\*\* and MCP-4. In hematopoietic assays, MIPF-2 strongly suppressed the colony formation by the high proliferative potential colony-forming cell (HPP-CFC), which represents a multipotential hematopoietic progenitor.

L3 ANSWER 5 OF 30 MEDLINE  
AN 97113354 MEDLINE  
DN 97113354 PubMed ID: 8955214  
TI Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine with activities on monocytes, eosinophils, and basophils induced in allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3.  
AU Garcia-Zepeda E A; Combadiere C; Rothenberg M E; Sarafi M N; Lavigne F; Hamid Q; Murphy P M; Luster A D  
CS Infectious Disease Unit, Massachusetts General Hospital, and Harvard Medical School, Charlestown 02129, USA.  
NC R01 CA69212-01 (NCI)  
SO JOURNAL OF IMMUNOLOGY, (1996 Dec 15) 157 (12) 5613-26.  
Journal code: 2985117R. ISSN: 0022-1767.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Abridged Index Medicus Journals; Priority Journals  
OS GENBANK-U46767  
EM 199701  
ED Entered STN: 19970219  
Last Updated on STN: 19970219  
Entered Medline: 19970123  
AB The chemokines are a large family of cytokines that regulate the complex and precise recruitment of immune cells into inflammatory foci. To fully appreciate their role in the pathogenesis of human diseases, the entire spectrum of chemokines, their receptors, their cellular targets, and mechanisms of regulation need to be delineated. Using eotaxin as a probe, we isolated a \*\*\*cDNA\*\*\* for a novel human beta (or CC) chemokine that, based on its biological and structural features, we have named monocyte chemoattractant protein (MCP)-4. Purified recombinant

MCP-4 protein was a potent chemoattractant for monocytes and eosinophils and stimulated histamine release from basophils. MCP-4 induced a calcium flux in HEK-293 cells transfected with the monocyte selective MCP-1 receptor (CCR-2B) and the eosinophil selective \*\*\*eotaxin\*\*\* \*\*\*receptor\*\*\* (CCR-3), but not in the more widely expressed CCR-1 or CCR-5. This novel chemokine is expressed in TNF-alpha and IL-1 activated epithelial and endothelial cells in vitro, and in the epithelial mucosa of patients with both Th2-type allergic and Th1-type nonallergic sinusitis. Furthermore, both IFN-gamma and IL-4, products of Th1 and Th2 cells, respectively, synergized with TNF-alpha and IL-1 in inducing MCP-4 mRNA accumulation. These properties of MCP-4 offer a molecular explanation for the observed accumulation of monocytes, eosinophils and basophils in both Th1- and Th2-type immune responses.

L3 ANSWER 6 OF 30 MEDLINE  
AN 96281895 MEDLINE  
DN 96281895 PubMed ID: 8676064  
TI Molecular cloning and characterization of a human eotaxin receptor expressed selectively on eosinophils.  
CM Comment in: J Exp Med. 1996 Jun 1;183(6):2421-6  
AU Ponath P D; Qin S; Post T W; Wang J; Wu L; Gerard N P; Newman W; Gerard C; Mackay C R  
CS LeukoSite, Inc., Cambridge, Massachusetts 02142, USA.  
SO JOURNAL OF EXPERIMENTAL MEDICINE, (1996 Jun 1) 183 (6) 2437-48.  
Journal code: 2985109R. ISSN: 0022-1007.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
OS GENBANK-U49727  
EM 199608  
ED Entered STN: 19960822  
Last Updated on STN: 20021231  
Entered Medline: 19960815  
AB The chemokine eotaxin is unusual in that it appears to be a highly specific chemoattractant for eosinophils. Ligand-binding studies with radiolabeled \*\*\*eotaxin\*\*\* demonstrated a \*\*\*receptor\*\*\* on eosinophils distinct from the known chemokine receptors CKR-1 and -2. The distinct eotaxin binding site on human eosinophils also bound RANTES (regulated on activation T expressed and secreted) and monocyte chemotactic protein (MCP)3. We have now isolated a \*\*\*cDNA\*\*\* from eosinophils, termed CKR-3, with significant sequence similarity to other well characterized chemokine receptors. Cells transfected with CKR-3 \*\*\*cDNA\*\*\* bound radiolabeled eotaxin specifically and with high affinity, comparable to the binding affinity observed with eosinophils.

This receptor also bound RANTES and MCP-3 with high affinity, but not other CC or CXC chemokines. Furthermore, receptor transfectants generated in a murine B cell lymphoma cell line migrated in transwell chemotaxis assays to eotaxin, RANTES, and MCP-3, but not to any other chemokines. A monoclonal antibody recognizing CKR-3 was used to show that eosinophils, but not other leukocyte types, expressed this receptor. This pattern of expression was confirmed by Northern blot with RNA from highly purified leukocyte subsets. The restricted expression of CKR-3 on eosinophils and the fidelity of eotaxin binding to CKR-3, provides a potential mechanism for the selective recruitment and migration of eosinophils within tissues.

L3 ANSWER 7 OF 30 MEDLINE  
 AN 96235049 MEDLINE  
 DN 96235049 PubMed ID: 8642349  
 TI Monocyte chemotactic protein 4 (MCP-4), a novel structural and functional analogue of MCP-3 and eotaxin.  
 AU Ugucioni M; Loetscher P; Forssmann U; Dewald B; Li H; Lima S H; Li Y; Kreider B; Garotta G; Thelen M; Baggiolini M  
 CS Theodor Kocher Institute, University of Bern, Switzerland.  
 SO JOURNAL OF EXPERIMENTAL MEDICINE, (1996 May 1) 183 (5) 2379-84.  
 Journal code: 2985109R. ISSN: 0022-1007.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals; AIDS  
 EM 199607  
 ED Entered STN: 19960726  
 Last Updated on STN: 19960726  
 Entered Medline: 19960718  
 AB A novel human CC chemokine complementary \*\*\*DNA\*\*\* was identified in a library constructed from human fetal RNA, cloned into a baculovirus vector, and expressed in Sf9 insect cells. The mature recombinant protein that was released had the NH2-terminal sequence pyro-QPDALNPSTC...and consisted of 75 amino acids. Minor amounts of two variants of 77 and 82 residues (NH2 termini: LAQPDA...and FNPQGLAQPDA...) were released as well.  
 The novel chemokine was designated monocyte chemotactic protein 4 (MCP-4) and the variants were designated (LA)MCP-4 and (FNPQGLA)MCP-4. MCP-4 shares the pyroglutamic acidproline NH2-terminal motif and 56-61% sequence identity with the three known monocyte chemotactic proteins and is 60% identical to eotaxin. It has marked functional similarities to MCP-3 and eotaxin. Like MCP-3, MCP-4 is a chemoattractant of high efficacy for monocytes and T lymphocytes. On these cells, it binds to receptors that recognize MCP-1, MCP-3, and RANTES. On eosinophils, MCP-4 has similar efficacy and potency as MCP-3, RANTES, and cotaxin. It shares

\*\*\*receptors\*\*\* with \*\*\*eotaxin\*\*\* and shows full cross-desensitization with this eosinophil-selective chemokine. Of the two variants, only (LA)MCP-4 could be purified in sufficient quantities for testing and was found to be at least 30-fold less potent than MCP-4 itself. This suggests that the 75-residue form with the characteristic NH2 terminus of an MCP is the biologically relevant species.

L3 ANSWER 8 OF 30 MEDLINE  
 AN 96205964 MEDLINE  
 DN 96205964 PubMed ID: 8631813  
 TI Molecular cloning of human eotaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil eotaxin receptor, CC chemokine receptor 3.  
 AU Kitaura M; Nakajima T; Imai T; Harada S; Combadiere C; Tiffany H L; Murphy P M; Yoshie O  
 CS Shionogi Institute for Medical Science, Osaka, Japan.  
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 Mar 29) 271 (13) 7725-30.  
 Journal code: 2985121R. ISSN: 0021-9258.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 OS GENBANK-D49372  
 EM 199607  
 ED Entered STN: 19960715  
 Last Updated on STN: 20000303  
 Entered Medline: 19960703  
 AB The CC chemokine eotaxin is a selective chemoattractant for guinea pig eosinophils, first purified from bronchoalveolar lavage fluid in a guinea pig model of allergic airway inflammation. We have now isolated the gene and \*\*\*cDNA\*\*\* for a human counterpart of eotaxin. The gene maps to chromosome 17 and is expressed constitutively at high levels in small intestine and colon, and at lower levels in various other tissues. The deduced mature protein sequence is 66% identical to human monocyte chemoattractant protein-1, and 60% identical to guinea pig eotaxin. Recombinant human eotaxin produced in insect cells induced a calcium flux response in normal human eosinophils, but not in neutrophils or monocytes. The response could not be desensitized by pretreatment of eosinophils with other CC chemokines, suggesting a unique receptor. In this regard, we show that human eotaxin is a potent and highly specific agonist for CC chemokine receptor 3, a G protein-coupled receptor selectively expressed in human eosinophils. Thus \*\*\*eotaxin\*\*\* and CC chemokine \*\*\*receptor\*\*\* 3 may be host factors highly specialized for eosinophil recruitment in inflammation, and may be good targets for the development of selective drugs for inflammatory diseases where eosinophils contribute to pathogenesis, such as asthma.

L3 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2003 ACS  
 AN 2002:637694 CAPLUS  
 DN 137:184472  
 TI Human G-protein chemokine receptor HDGMR10,  
 polynucleotides and antibodies  
 for diagnosis and therapy of immune diseases and screening of  
 agonists and  
 antagonists  
 IN Roschke, Viktor; Rosen, Craig A.; Ruben, Steven M.  
 PA Human Genome Sciences, Inc., USA  
 SO PCT Int. Appl., 562 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.
DATE			

PI WO 2002064612 A2 20020822 WO 2002-US3634  
 20020208  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY,  
 BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB,  
 GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
 NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
 TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU,  
 TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM,  
 ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,  
 SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG  
 WO 2001058916 A2 20010816 WO 2001-US4153  
 20010209  
 WO 2001058916 A3 20020418  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY,  
 BZ, CA, CH, CN,  
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE,  
 GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,  
 PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,  
 UZ, VN,  
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW,  
 AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
 TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,  
 TG

US 2002061834 A1 20020523 US 2001-779880  
 20010209

PRAI US 2001-779880 A 20010209  
 WO 2001-US4153 W 20010209  
 US 2001-297257P P 20010612  
 US 2001-310458P P 20010808  
 US 2001-328447P P 20011012  
 US 2001-341725P P 20011221  
 US 2000-181258P P 20000209  
 US 2000-187999P P 20000309  
 US 2000-234336P P 20000922

AB The present invention relates to a novel human gene or

polynucleotide  
 encoding G protein chemokine receptor HDGMR10, a CCR5  
 family member. The  
 invention also relates to G protein chemokine receptor HDGMR10  
 polypeptides, as well as vectors, host cells, antibodies directed to  
 G  
 protein chemokine receptor HDGMR10 polypeptides, and  
 recombinant methods  
 for producing the same. The invention further relates to screening  
 methods for identifying agonists and antagonists of G protein  
 chemokine  
 receptor HDGMR10 activity. The G protein chemokine receptor  
 HDGMR10-related agents are useful for diagnosis and treatment  
 of related  
 immune diseases, HIV infection, autoimmune disease,  
 neurodegenerative  
 disorder, infectious disease, etc.

L3 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2003 ACS  
 AN 2000:900080 CAPLUS  
 DN 134:308942  
 TI Overexpression of eotaxin and the CCR3 receptor in human  
 atherosclerosis:  
 Using genomic technology to identify a potential novel pathway of  
 vascular  
 inflammation  
 AU Haley, Kathleen J.; Lilly, Craig M.; Yang, Jeong-Hee; Feng,  
 Yajun;  
 Kennedy, Scott P.; Turi, Thomas G.; Thompson, John F.;  
 Sukhova, Galina H.;  
 Libby, Peter; Lee, Richard T.  
 CS Respiratory Division Department of Medicine, Harvard Medical  
 School,  
 Brigham and Women's Hospital, Boston, MA, 02115, USA  
 SO Circulation (2000), 102(18), 2185-2189  
 CODEN: CIRCAZ; ISSN: 0009-7322  
 PB Lippincott Williams & Wilkins  
 DT Journal  
 LA English  
 AB Unstable atherosclerotic lesions typically have an abundant  
 inflammatory  
 cell infiltrate, including activated T cells, macrophages, and mast  
 cells,  
 which may decrease plaque stability. The pathophysiol. of  
 inflammatory  
 cell recruitment and activation in the human atheroma is  
 incompletely  
 described. We hypothesized that differential gene expression with  
 \*\*\*DNA\*\*\* microarray technol. would identify new genes that  
 may  
 participate in vascular inflammation. RNA isolated from cultured  
 human  
 aortic smooth muscle cells treated with tumor necrosis  
 factor-.alpha.  
 (TNF-.alpha.) was examd. with a \*\*\*DNA\*\*\* microarray with  
 8600 genes.  
 This expt. and subsequent Northern analyses demonstrated  
 marked increases  
 in steady-state eotaxin mRNA (>20 fold), a chemokine initially  
 described  
 as a chemotactic factor for eosinophils. Because eosinophils are  
 rarely  
 present in human atherosclerosis, we then studied tissue samples  
 from 7  
 normal and 14 atherosclerotic arteries. Immunohistochem. anal.  
 demonstrated overexpression of \*\*\*eotaxin\*\*\* protein and its  
 \*\*\*receptor\*\*\*, CCR3, in the human atheroma, with negligible  
 expression  
 in normal vessels. Eotaxin was predominantly located in smooth  
 muscle  
 cells. The CCR3 receptor was localized primarily to

macrophage-rich regions as defined by immunopositivity for CD 68; a minority of mast cells also demonstrated immunopositivity for the CCR3 receptor. \*\*\*Eotaxin\*\*\* and its \*\*\*receptor\*\*\*, CCR3, are overexpressed in human atherosclerosis, suggesting that eotaxin participates in vascular inflammation. These data demonstrate how genomic differential expression technol. can identify novel genes that may participate in the stability of atherosclerotic lesions.

RE.CNT 27 THERE ARE 27 CITED REFERENCES  
AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2003 ACS  
AN 1999:477333 CAPLUS  
DN 131:270723  
TI A novel human CC chemokine, eotaxin-3, which is expressed in IL-4-stimulated vascular endothelial cells, exhibits potent activity toward eosinophils  
AU Shinkai, Akeo; Yoshisue, Hajime; Koike, Masamichi; Shoji, Emi; Nakagawa, Satoshi; Saito, Akiko; Takeda, Tsuyoshi; Imabeppu, Susumu; Kato, Yuzuru; Hanai, Nobuo; Anazawa, Hideharu; Kuga, Tetsuro; Nishi, Tatsunari  
CS Tokyo Research Laboratories, Tokyo, 194-8533, Japan  
SO Journal of Immunology (1999), 163(3), 1602-1610  
CODEN: JOIMA3; ISSN: 0022-1767  
PB American Association of Immunologists  
DT Journal  
LA English  
AB IL-4 has been shown to be involved in the accumulation of leukocytes, esp. eosinophils, at sites of inflammation by acting on vascular endothelial cells. To identify novel mols. involved in the IL-4-dependent eosinophil extravasation, cDNA prepd. from HUVEC stimulated with IL-4 was subjected to differential display anal., which revealed a novel CC chemokine designated as eotaxin-3. The human eotaxin-3 gene has been localized to chromosome 7q11.2, unlike most other CC chemokine genes. The predicted mature protein of 71 aa showed 27-42% identity to other human CC chemokines. The recombinant protein induced a transient increase in the cytosolic Ca<sup>2+</sup> concn. and in vitro chemotaxis on eosinophils. Furthermore, in cynomolgus monkeys, the accumulation of eosinophils was obsd. at the sites where the protein was injected. Eotaxin-3 inhibited the binding of 125I-eotaxin, but not 125I-macrophage inflammatory protein-1.alpha., to eosinophils and acted on cell lines transfected with CCR-3, suggesting that eotaxin-3 recognized CCR-3. IL-13 as well as IL-4 up-regulated eotaxin-3 mRNA in HUVEC, whereas neither TNF-.alpha., IL-1.beta., IFN-.gamma., nor TNF-.alpha. plus IFN-.gamma. did. The expression profile of eotaxin-3 is different from those of eotaxin, RANTES, and monocyte chemoattractant protein-4, which are potent eosinophil-selective chemoattractants and are induced by either

TNF-.alpha. or TNF-.alpha. plus IFN-.gamma.. These results suggest that eotaxin-3 may contribute to the eosinophil accumulation in atopic diseases.

RE.CNT 50 THERE ARE 50 CITED REFERENCES  
AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2003 ACS  
AN 1998:774856 CAPLUS  
DN 130:138008  
TI Cloning and characterization of the guinea pig eosinophil eotaxin receptor, C-C chemokine receptor-3: blockade using a monoclonal antibody in vivo  
AU Sabroe, Ian; Conroy, Dolores M.; Gerard, Norma P.; Li, You; Collins, Paul D.; Post, Theodore W.; Jose, Peter J.; Williams, Timothy J.; Gerard, Craig J.; Ponath, Paul D.  
CS Leukocyte Biol. Section, Biomedical Science Div., Imperial Coll. Sch. Medicine, London, UK  
SO Journal of Immunology (1998), 161(11):6139-6147  
CODEN: JOIMA3; ISSN: 0022-1767  
PB American Association of Immunologists  
DT Journal  
LA English  
AB Certain C-C chemokines, signaling via the \*\*\*eotaxin\*\*\* \*\*\*receptor\*\*\* C-C chemokine \*\*\*receptor\*\*\* -3 (CCR3), are thought to be central mediators of eosinophil accumulation in allergic inflammation. To investigate the role of CCR3 in vivo, the authors cloned the guinea pig \*\*\*eotaxin\*\*\* \*\*\*receptor\*\*\* (guinea pig CCR3) from a genomic \*\*\*DNA\*\*\* library. The authors isolated a single-exon open reading frame coding for a 358-amino acid chemokine receptor protein with 67 and 69% homol. to human and murine CCR3, resp. When expressed in stable transfectants, this \*\*\*receptor\*\*\* bound 125I-labeled guinea pig \*\*\*eotaxin\*\*\*, 125I-labeled human monocyte chemotactic protein-3, and 125I-labeled human RANTES. In chemotaxis assays, guinea pig CCR3 transfectants responded only to guinea pig eotaxin, with a maximal effect at 100 nM. MAbs were raised that bound selectively to both guinea pig CCR3 transfectants and guinea pig eosinophils. One of these mAbs, 2A8, blocked both ligands binding to transfectants and their chemotaxis in response to eotaxin. The Ab also inhibited chemotaxis and the elevation of cytosolic calcium in guinea pig eosinophils in response to eotaxin. F(ab')<sub>2</sub> fragments of 2A8 were prepd. that retained the ability to inhibit eosinophil calcium responses to eotaxin. Pretreatment of 111In-labeled eosinophils in vitro with F(ab')<sub>2</sub> 2A8 selectively inhibited their accumulation in response to eotaxin in vivo. These data demonstrate that functional blockade of eosinophil chemokine receptors can be achieved in vivo and provide further support for the development of novel

anti-inflammatory drugs targeting eosinophil recruitment through chemokine receptor antagonism.

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2003 ACS  
AN 1997:740259 CAPLUS  
DN 128:21876  
TI Eosinophil eotaxin receptor  
IN Daugherty, Bruce L.; Demartino, Julie A.; Springer, Martin S.; Siciliano,

Salvatore J.

PA Merck & Co., Inc., USA; Daugherty, Bruce L.; Demartino, Julie A.;

Springer, Martin S.; Siciliano, Salvatore J.

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
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PI WO 9741154	A1	19971106	WO 1997-US6568
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19970424

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 1012190	A1	20000628	EP 1997-925399
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19970424

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

US 6271347	B1	20010807	US 1997-847296
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19970424

JP 2002503950	T2	20020205	JP 1997-538970
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19970424

US 2002192214	A1	20021219	US 2001-922895
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20010806

PRAI US 1996-16158P P 19960426

US 1996-17113P A 19960426

US 1996-640991 A 19960426

GB 1997-894 A 19970117

US 1997-847296 A3 19970424

WO 1997-US6568 W 19970424

AB The eosinophil eotaxin receptor has been isolated, cloned and sequenced.

This receptor is a human .beta.-chemokine receptor and has been designated

"CC CKR3". The eosinophil eotaxin receptor may be used to screen and

identify compds. that bind to the eosinophil eotaxin receptor. Such

compds. would be useful in the treatment and prevention of atopic conditions including allergic rhinitis, dermatitis, conjunctivitis, and

particularly bronchial asthma.

L3 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2003 ACS  
AN 1997:372091 CAPLUS

DN 126:342447

TI Novel human CC chemokine

IN Kitaura, Motoji; Nakajima, Toshihiro; Harada, Shigenori  
PA Shionogi and Co., Ltd., Japan; Kitaura, Motoji; Nakajima, Toshihiro;

Harada, Shigenori

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.
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PI WO 9712914	A1	19970410	WO 1996-JP2851
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19961001

W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP,

KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI,

SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,

MR, NE, SN, TD, TG

AU 9670976	A1	19970428	AU 1996-70976
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19961001

PRAI JP 1995-259067 19951005

JP 1996-41965 19960228

WO 1996-JP2851 19961001

AB Disclosed are a peptide which is a human homolog of guinea pig eotaxin or

a novel chemokine, in particular, a human CC chemokine having an activity

on human eosinophils; the structural gene of the peptide; an expression

vector having the gene; a transformant having the expression vector

introduced thereinto; a process for producing the peptide by using the

transformant; a monoclonal antibody against the peptide; a method for

assaying the peptide by using the monoclonal antibody; and a method for

screening an agonist or antagonist of the peptide. The antibodies, agonists and antagonists are useful for diagnosis and therapy of

parasite infection, cancer, allergy (asthma, atopic dermatitis, etc.), or eosinophil infiltration-assocd. diseases. Mol. cloning of guinea

pig

eotaxin \*\*\*cDNA\*\*\* and human eotaxin genome \*\*\*DNA\*\*\* and

\*\*\*cDNA\*\*\* were performed. Expression of human eotaxin in different

human organs and tissues was also studied. Also, vector encoding human

\*\*\*eotaxin\*\*\* \*\*\*receptor\*\*\* was prep'd. and expressed in 293T cells,

and biol. activity of human \*\*\*eotaxin\*\*\* peptides to the recombinant

\*\*\*receptor\*\*\* was demonstrated.

L3 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2003 ACS  
AN 1997:246715 CAPLUS

DN 126:316141

TI Molecular and functional characterization of two novel human C-C

chemokines as inhibitors of two distinct classes of myeloid progenitors

AU Patel, Vikram P.; Kreider, Brent L.; Li, Yuling; Li, Haodong; Leung, Kam;

Salcedo, Theodora; Nardelli, Bernardetta; Pippalla, Vani; Gentz, Solange;

et al.

CS Department of Cell Biology, Human Genome Sciences, Inc., Rockville, MD,

20850, USA

SO Journal of Experimental Medicine (1997), 185(7), 1163-1172  
CODEN: JEMEAV; ISSN: 0022-1007

PB Rockefeller University Press

DT Journal

LA English

AB Two novel human .beta.-chemokines, Ck.beta.-8 or myeloid progenitor

inhibitory factor 1 (MPIF-1), and Ck.beta.-6 or MPIF-2, were discovered as

part of a large scale \*\*\*cDNA\*\*\* sequencing effort. The MPIF-1 and

MPIF-2 cDNAs were isolated from aortic endothelium and activated monocyte

libraries, resp. Both of the cDNAs were cloned into a baculovirus vector

and expressed in insect cells. The mature recombinant MPIF-1 protein

consists of 99 amino acids and is most homologous to macrophage inflammatory protein (MIP)-1.alpha., showing 51% identity. It

displays chemotactic activity on resting T lymphocytes and monocytes, a minimal but

significant activity on neutrophils, and is neg. on activated T lymphocytes. MPIF-1 is also a potent suppressor of bone marrow

low proliferative potential colony-forming cells, a committed progenitor that

gives rise to granulocyte and monocyte lineages. The mature recombinant

MPIF-2 has 93 amino acid residues and shows 39 and 42% identity with

monocyte chemoattractant protein (MCP)-3 and MIP-1.alpha., resp. It

displays chemotactic activity on resting T lymphocytes, a minimal activity

on neutrophils, and is neg. on monocytes and activated T lymphocytes. On

eosinophils, MPIF-2 produces a transient rise of cytosolic Ca2+ and uses

the \*\*\*receptor\*\*\* for \*\*\*eotaxin\*\*\* and MCP-4. In hematopoietic

assays, MPIF-2 strongly suppressed the colony formation by the high

proliferative potential colony-forming cell (HPP-CFC), which represents a

multipotential hematopoietic progenitor.

L3 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2003 ACS

AN 1997:184606 CAPLUS

DN 126:170408

TI Human eotaxin and eotaxin receptor and genes and cDNAs encoding them and

their diagnostic and therapeutic uses

IN Ponath, Paul D.; Qin, Shixin; Ringler, Douglas J.; Newman, Walter; Mackay,

Charles

PA Leukosite, Inc., USA; Ponath, Paul D.; Qin, Shixin; Ringler, Douglas J.;

Newman, Walter; Mackay, Charles

SO PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO.  
DATE

PI WO 9700960 A1 19970109 WO 1996-US10723  
19960621

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,

ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,

LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,

SE, SG

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

AU 9662882 A1 19970122 AU 1996-62882

19960621

PRAI US 1995-494093 19950623

WO 1996-US10723 19960621

AB A human eotaxin and its cognate receptor and genes and cDNAs encoding them

are characterized for use in the manuf. of the eotaxin and in diagnostic

and therapeutic applications. Methods of use of eotaxins, for example in

the recruitment of eosinophils to a particular site or in the treatment of

allergic conditions are also described. Human eotaxins can be used in

assays to identify inhibitors (e.g., antagonists) or promoters (agonists)

of human eotaxin function. Agents which inhibit or promote eotaxin

function can be administered to an individual, providing a new approach to

selective modulation of leukocyte function, which is useful in a variety

of inflammatory and autoimmune diseases, or in the treatment of infections. Cloning of the human gene using primers derived from

the pig eotaxin gene and chem. synthesis of human eotaxin are described.

Eotaxin

was shown to be a chemoattractant for eosinophils and the interaction was

mediated by CKR3, a novel C-C chemokine receptor.

L3 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2003 ACS

AN 1996:754315 CAPLUS

DN 126:88134

TI Human monocyte chemoattractant protein (MCP)-4 is a novel CC chemokine

with activities on monocytes, eosinophils, and basophils induced in

allergic and nonallergic inflammation that signals through the CC chemokine receptors (CCR)-2 and -3

AU Garcia-Zepeda, Eduardo A.; Combadiere, Christophe;

Rothenberg, Marc E.;

Sarafi, Mindy N.; Lavigne, Frank; Hamid, Qutayba; Murphy, Philip M.;

Luster, Andrew D.

CS Infectious Disease Unit, Massachusetts General Hosp., Charlestown, MA,

02129, USA

SO Journal of Immunology (1996), 157(12), 5613-5626

CODEN: JOIMA3; ISSN: 0022-1767

PB American Association of Immunologists

DT Journal

LA English

AB The chemokines are a large family of cytokines that regulate the complex

and precise recruitment of immune cells into inflammatory foci. To fully

appreciate their role in the pathogenesis of human diseases, the entire

spectrum of chemokines, their receptors, their cellular targets, and mechanisms of regulation need to be delineated. Using eotaxin as

a probe, the authors isolated a \*\*\*cDNA\*\*\* for a novel human .beta. (or CC)

chemokine that, based on its biol. and structural features, the



authors

have named monocyte chemoattractant protein (MCP)-4. Purified recombinant

MCP-4 protein was a potent chemoattractant for monocytes and eosinophils

and stimulated histamine release from basophils. MCP-4 induced a calcium

flux in HEK-293 cells transfected with the monocyte selective MCP-1

receptor (CCR-2B) and the eosinophil selective \*\*\*eotaxin\*\*\*  
\*\*\*receptor\*\*\* (CCR-3), but not in the more widely expressed

CCR-1 or

CCR-5. This novel chemokine is expressed in TNF-.alpha. and IL-1

activated epithelial and endothelial cells in vitro, and in the epithelial

mucosa of patients with both Th2-type allergic and Th1-type nonallergic

sinusitis. Furthermore, both IFN-.gamma. and IL-4, products of Th1 and

Th2 cells, resp., synergized with TNF-.alpha. and IL-1 in inducing MCP-4

mRNA accumulation. These properties of MCP-4 offer a mol. explanation for

the obsd. accumulation of monocytes, eosinophils and basophils in both

Th1- and Th2-type immune responses.

L3 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2003 ACS

AN 1996:372102 CAPLUS

DN 125:84187

TI Molecular cloning and characterization of a human eotaxin receptor

expressed selectively on eosinophils

AU Ponath, Paul D.; Qin, Shixin; Post, Theodoré W.; Wang, Juan; Gerard, Norma

P.; Newman, Walter; Gerard, Craig; Mackay, Charles R.

CS LeukoSite, Inc., Cambridge, MA, 02142, USA

SO Journal of Experimental Medicine (1996), 183(6), 2437-2448

CODEN: JEMEA; ISSN: 0022-1007

PB Rockefeller University Press

DT Journal

LA English

AB The chemokine eotaxin is unusual in that it appears to be a highly

specific chemoattractant for eosinophils. Ligand-binding studies with

radiolabeled \*\*\*eotaxin\*\*\* demonstrated a \*\*\*receptor\*\*\* on

eosinophils distinct from the known chemokine receptors CKR-1 and -2. The

distinct eotaxin-binding site on human eosinophils also bound RANTES

(regulated on activation T expressed and secreted) and monocyte chemotactic protein (MCP)-3. The authors have now isolated a

\*\*\*cDNA\*\*\* from eosinophils, termed CKR-3, with significant sequence

similarity to other well characterized chemokine receptors. Cells transfected with

CKR-3 \*\*\*cDNA\*\*\* bound radiolabeled eotaxin specifically and with high

affinity, comparable to the binding affinity obsd. with eosinophils. This

receptor also bound RANTES and MCP-3 with high affinity, but not other CC

or CXC chemokines. Furthermore, receptor transfectants generated in a

murine B cell lymphoma cell line migrated in transwell chemotaxis assays

to eotaxin, RANTES, and MCP-3, but not to any other

chemokines. A

monoclonal antibody recognizing CKR-3 was used to show that eosinophils,

but not other leukocyte types, expressed this receptor. This pattern of

expression was confirmed by Northern blot with RNA from highly purified

leukocyte subsets. The restricted expression of CKR-3 on eosinophils and

the fidelity of eotaxin binding to CKR-3, provides a potential mechanism

for the selective recruitment and migration of eosinophils within tissues.

L3 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2003 ACS

AN 1996:319727 CAPLUS

DN 125:8094

TI Monocyte chemotactic protein 4 (MCP-4), a novel structural and functional

analog of MCP-3 and eotaxin

AU Ugucioni, Mariagrazia; Loetscher, Pius; Forssmann, Ulf; Dewald, Beatrice;

Li, Haodong; Lima, Solange Hensch; Li, Yuling; Kreider, Brent; Garotta,

Gianni; et al.

CS Theodor Kocher Inst., Univ. Bern, Bern, CH-3000, Switz.

SO Journal of Experimental Medicine (1996), 183(5), 2379-2384

CODEN: JEMEA; ISSN: 0022-1007

PB Rockefeller University Press

DT Journal

LA English

AB A novel human CC chemokine complementary \*\*\*DNA\*\*\* was identified in a

library constructed from human fetal RNA, cloned into a baculovirus

vector, and expressed in Sf9 insect cells. The mature recombinant protein

that was released had the NH2-terminal sequence

pyro-QPDALNVPSTC and

consisted of 75 amino acids. Minor amts. of two variants of 77 and 82

residues (NH2 termini: LAQPDA and FNPQGLAQPDA) were released as well. The

novel chemokine was designated monocyte chemotactic protein 4 (MCP-4) and

the variants were designated (LA)MCP-4 and

(FNPQGLA)MCP-4. MCP-4 shares

the pyroglutamic acid-proline NH2-terminated motif and 56-61% sequence

identity with the three known monocyte chemotactic proteins and is 60%

identical to eotaxin. It has marked functional similarities to MCP-3 and

eotaxin. Like MCP-3, MCP-4 is a chemoattractant of high efficacy for

monocytes and T lymphocytes. On these cells, it binds to receptors that

recognize MCP-1, MCP-3, and RANTES. On eosinophils, MCP-4 has similar

efficacy and potency as MCP-3, RANTES, and eotaxin. It shares \*\*\*receptors\*\*\* with \*\*\*eotaxin\*\*\* and shows full

cross-desensitization with this eosinophil-selective chemokine. Of the

two variants, only (LA)MCP-4 could be purified in sufficient quantities

for testing and was at least 30-fold less potent than MCP-4 itself. This

suggests that the 75-residue form with the characteristic NH2 terminus of

an MCP is the biol. relevant species.

L3 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2003 ACS  
 AN 1996:319722 CAPLUS  
 DN 125:55851  
 TI Cloning, expression, and characterization of the human eosinophil eotaxin receptor  
 AU Daugherty, Bruce L.; Siciliano, Salvatore J.; DeMartino, Julie A.; Malkowitz, Lorraine; Sirotina, Anna; Springer, Martin S.  
 CS Dep. Inflammation Res. Immunol. Res., Merck Res. Laboratories, Rahway, NJ, 07065, USA  
 SO Journal of Experimental Medicine (1996), 183(5), 2349-2354  
 CODEN: JEMEA; ISSN: 0022-1007  
 PB Rockefeller University Press  
 DT Journal  
 LA English  
 AB Although there is a mounting body of evidence that eosinophils are recruited to sites of allergic inflammation by a no. of .beta.-chemokines, particularly eotaxin and RANTES, the receptor that mediates these actions has not been identified. The authors have now cloned a G protein-coupled receptor, CC CKR3, from human eosinophils which, when stably expressed in AML14.3D10 cells bound eotaxin, MCP-3 and RANTES with Kds of 0.1, 2.7, and 3.1 nM, resp. CC CKR3 also bound MCP-1 with lower affinity, but did not bind MIP-1.alpha. or MIP-1.beta.. Eotaxin, RANTES, and to a lesser extent MCP-3, but not the other chemokines, activated CC CKR3 as detd. by their ability to stimulate a Ca2+-flux. Competition binding studies on primary eosinophils gave binding affinities for the different chemokines which were indistinguishable from those measured with CC CKR3. Since CC CKR3 is prominently expressed in eosinophils the authors conclude that CC CKR3 is the eosinophil eotaxin receptor. Eosinophils also express a much lower level of a second chemokine receptor, CC CKR1, which appears to be responsible for the effects of MIP-1.alpha..

L3 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2003 ACS  
 AN 1996:198753 CAPLUS  
 DN 124:340611  
 TI Molecular cloning of human eotaxin, an eosinophil-selective CC chemokine, and identification of a specific eosinophil eotaxin receptor, CC chemokine receptor 3  
 AU Kitaura, Motoji; Nakajima, Toshihiro; Imai, Toshio; Harada, Shigenori; Combadiere, Christophe; Tiffany, H. Lee; Murphy, Philip M.; Yoshie, Osamu  
 CS Shionogi Inst. Medical Science, Osaka, 566, Japan  
 SO Journal of Biological Chemistry (1996), 271(13), 7725-7730  
 CODEN: JBCHA3; ISSN: 0021-9258  
 PB American Society for Biochemistry and Molecular Biology  
 DT Journal  
 LA English  
 AB The CC chemokine eotaxin is a selective chemoattractant for guinea pig eosinophils, first purified from bronchoalveolar lavage fluid in a guinea

pig model of allergic airway inflammation. The authors have now isolated the gene and \*\*\*cDNA\*\*\* for a human counterpart of eotaxin. The gene maps to chromosome 17 and is expressed constitutively at high levels in small intestine and colon, and at lower levels in various other tissues. The deduced mature protein sequence is 66% identical to human monocyte chemoattractant protein-1, and 60% identical to guinea pig eotaxin. Recombinant human eotaxin produced in insect cells induced a calcium flux response in normal human eosinophils, but not in neutrophils or monocytes. The response could not be desensitized by pretreatment of eosinophils with other CC chemokines, suggesting a unique receptor. In this regard, the authors show that human eotaxin is a potent and highly specific agonist for CC chemokine receptor 3, a G protein-coupled receptor selectively expressed in human eosinophils. Thus \*\*\*eotaxin\*\*\* and CC chemokine \*\*\*receptor\*\*\* 3 may be host factors highly specialized for eosinophil recruitment in inflammation, and may be good targets for the development of selective drugs for inflammatory diseases where eosinophils contribute to pathogenesis, such as asthma.

L3 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2003 ACS  
 AN 1996:187766 CAPLUS  
 DN 124:258108  
 TI Cloning of the human eosinophil chemoattractant, eotaxin. Expression, receptor binding, and functional properties suggest a mechanism for the selective recruitment of eosinophils  
 AU Ponath, Paul D.; Qin, Shixin; Ringler, Douglas J.; Clark-Lewis, Ian; Wang, Juan; Kassam, Nasim; Smith, Heidi; Shi, Xiaojie; Gonzalo, Jose-Angel; et al.  
 CS LeukoSite, Inc., Cambridge, MA, 02142, USA  
 SO Journal of Clinical Investigation (1996), 97(3), 604-12  
 CODEN: JGINAO; ISSN: 0021-9738  
 PB Rockefeller University Press  
 DT Journal  
 LA English  
 AB The CC chemokine eotaxin, identified in guinea pigs and also recently in mice, may be a key element for the selective recruitment of eosinophils to certain inflamed tissues. Using a partial mouse eotaxin cDNA probe, the human eotaxin gene was cloned and was found to be 61.8 and 63.2% identical at the amino acid level to guinea pig and mouse eotaxin. Human eotaxin protein was a strong and specific eosinophil chemoattractant in vitro and was an effective eosinophil chemoattractant when injected into the skin of a rhesus monkey. Radiolabeled eotaxin was used to identify a high affinity receptor on eosinophils (0.52 nM Kd), expressed at 4.8 .times.

104 sites per cell. This receptor also bound RANTES and monocyte chemotactic protein-3 with lower affinity, but not macrophage inflammatory protein-1.alpha.. Eotaxin could desensitize calcium responses of eosinophils to RANTES and monocyte chemotactic protein-3, although RANTES was able to only partially desensitize eosinophil calcium responses to eotaxin. Immunohistochem. on human nasal polyp with anti-eotaxin mAbs showed that certain leukocytes as well as respiratory epithelium were intensely immunoreactive, and eosinophil infiltration occurred at sites of eotaxin upregulation. Thus eotaxin in humans is a potent and selective eosinophil chemoattractant that is expressed by a variety of cell types in certain inflammatory conditions.

L3 ANSWER 23 OF 30 USPTAFULL  
 AN 2002:336860 USPTAFULL  
 TI Eosinophil eotaxin receptor  
 IN Daugherty, Bruce L., South Orange, NJ, UNITED STATES  
 Demartino, Julie A., Cranford, NJ, UNITED STATES  
 Siciliano, Salvatore J., East Brunswick, NJ, UNITED STATES  
 Springer, Martin S., Westfield, NJ, UNITED STATES  
 PA Merck & Co., Inc. (U.S. corporation)  
 PI US 2002192214 A1 20021219  
 AI US 2001-922895 A1 20010806 (9)  
 RLI Division of Ser. No. US 1997-847296, filed on 24 Apr 1997, PATENTED  
 PRAI US 1996-16158P 19960426 (60)  
 US 1996-17113P 19960426 (60)

DT Utility  
 FS APPLICATION  
 LREP Merck & Co., Inc., Patent Department, P.O. Box 2000 - RY60-30, Rahway, NJ, 07065-0907

CLMN Number of Claims: 34  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1312  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The eosinophil eotaxin receptor has been isolated, cloned and sequenced.

This receptor is a human .beta.-chemokine receptor and has been designated "CC CKR3". The eosinophil eotaxin receptor may be used to screen and identify compounds that bind to the eosinophil eotaxin receptor. Such compounds would be useful in the treatment and prevention of atopic conditions including allergic rhinitis, dermatitis, conjunctivitis, and particularly bronchial asthma.

L3 ANSWER 24 OF 30 USPTAFULL  
 AN 2002:199087 USPTAFULL  
 TI Method for inducing chemotaxis in endothelial cells by administering stromal cell derived factor-1alpha  
 IN Gupta, Shalley K., Lafayette Hill, PA, UNITED STATES  
 PA SmithKline Beecham Corporation (U.S. corporation)  
 PI US 2002107196 A1 20020808  
 AI US 2001-953717 A1 20010917 (9)  
 RLI Division of Ser. No. US 1999-358624, filed on 21 Jul 1999, PENDING  
 PRAI US 1998-93596P 19980721 (60)  
 DT Utility  
 FS APPLICATION

LREP GLAXOSMITHKLINE, Corporate Intellectual Property - UW2220, P.O. Box 1539, King of Prussia, PA, 19406-0939  
 CLMN Number of Claims: 6  
 ECL Exemplary Claim: 1  
 DRWN 4 Drawing Page(s)  
 LN.CNT 1795  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB CXCR4 and SDF-1.alpha. polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed.  
 Also disclosed are methods for utilizing CXCR4 and SDF-1.alpha. polypeptides and polynucleotides in the design of protocols for the treatment of inflammatory diseases, angiogenic diseases, and infections, such Human Immunodeficiency Virus (HIV).

L3 ANSWER 25 OF 30 USPTAFULL  
 AN 2002:199086 USPTAFULL  
 TI Method for inducing chemotaxis in endothelial cells by administering stromal cell derived factor-1alpha  
 IN Gupta, Shalley K., Lafayette Hill, PA, UNITED STATES  
 PA SmithKline Beecham Corporation (U.S. corporation)  
 PI US 2002107195 A1 20020808  
 AI US 2001-953692 A1 20010917 (9)  
 RLI Continuation of Ser. No. US 1999-358624, filed on 21 Jul 1999, PENDING  
 PRAI US 1998-93596P 19980721 (60)  
 DT Utility  
 FS APPLICATION

LREP GLAXOSMITHKLINE, Corporate Intellectual Property - UW2220, P.O. Box 1539, King of Prussia, PA, 19406-0939  
 CLMN Number of Claims: 6  
 ECL Exemplary Claim: 1  
 DRWN 4 Drawing Page(s)  
 LN.CNT 1795  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB CXCR4 and SDF-1.alpha. polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed.  
 Also disclosed are methods for utilizing CXCR4 and SDF-1.alpha. polypeptides and polynucleotides in the design of protocols for the treatment of inflammatory diseases, angiogenic diseases, and infections, such Human Immunodeficiency Virus (HIV).

L3 ANSWER 26 OF 30 USPTAFULL  
 AN 2002:175191 USPTAFULL  
 TI CCR-3 receptor antagonists  
 IN Dhanak, Dashyant, West Chester, PA, United States  
 Widdowson, Katherine L., King of Prussia, PA, United States  
 White, John R., Coatesville, PA, United States  
 PA SmithKline Beecham Corporation, Philadelphia, PA, United States (U.S. corporation)  
 PI US 6420424 B1 20020716  
 WO 9955330 19991104  
 AI US 2000-674208 20001027 (9)  
 WO 1999-US8950 19990427  
 20001027 PCT 371 date  
 PRAI US 1998-83229P 19980427 (60)  
 DT Utility  
 FS GRANTED

EXNAM Primary Examiner: Reamer, James H.  
LREP Simon, Soma G., King, William T., Kinzig, Charles M.  
CLMN Number of Claims: 9  
ECL Exemplary Claim: 1,8  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 685  
AB Phenylalanine sulfonamide derivatives and their use as CCR-3 receptor antagonist.

L3 ANSWER 27 OF 30 USPTFULL  
AN 2002:119846 USPTFULL  
TI Human G-protein Chemokine receptor (CCR5) HDGNR10  
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Roschke, Viktor, Rockville, MD, UNITED STATES  
Li, Yi, Sunnyvale, CA, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
PI US 2002061834 A1 20020523  
AI US 2001-779880 A1 20010209 (9)  
PRAI US 2000-181258P 20000209 (60)  
US 2000-187999P 20000309 (60)  
US 2000-234336P 20000922 (60)  
DT Utility  
FS APPLICATION  
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100  
NEW YORK AVENUE, N.W., SUITE  
600, WASHINGTON, DC, 20005-3934  
CLMN Number of Claims: 61  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 18667  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to a novel human protein called Human  
G-protein Chemokine Receptor (CCR5) HDGNR10, and  
isolated  
polynucleotides encoding this protein. The invention is also  
directed to  
human antibodies that bind Human G-protein Chemokine  
Receptor (CCR5)  
HDGNR10 and to polynucleotides encoding those antibodies.  
Also provided  
are vectors, host cells, antibodies, and recombinant methods for  
producing Human G-protein Chemokine Receptor (CCR5)  
HDGNR10 and human  
anti-Human G-protein Chemokine Receptor (CCR5) HDGNR10  
antibodies. The  
invention further relates to diagnostic and therapeutic methods  
useful  
for diagnosing and treating diseases, disorders, and/or conditions  
related to this novel human protein and these novel human  
antibodies.

L3 ANSWER 28 OF 30 USPTFULL  
AN 2002:92268 USPTFULL  
TI Human G-protein Chemokine Receptor HDGNR10  
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Roschke, Viktor, Rockville, MD, UNITED STATES  
Li, Yi, Sunnyvale, CA, UNITED STATES  
Ruben, Steven M., Olney, MD, UNITED STATES  
PI US 2002048786 A1 20020425  
AI US 2001-779879 A1 20010209 (9)  
PRAI US 2000-181258P 20000209 (60)  
US 2000-187999P 20000309 (60)  
US 2000-234336P 20000922 (60)  
DT Utility  
FS APPLICATION  
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100  
NEW YORK AVENUE, N.W., SUITE  
600, WASHINGTON, DC, 20005-3934  
CLMN Number of Claims: 61

ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 17969  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to a novel human protein called Human  
G-protein Chemokine Receptor (CCR5) HDGNR10, and  
isolated  
polynucleotides encoding this protein. The invention is also  
directed to  
human antibodies that bind Human G-protein Chemokine  
Receptor (CCR5)  
HDGNR10 and to polynucleotides encoding those antibodies.  
Also provided  
are vectors, host cells, antibodies, and recombinant methods for  
producing Human G-protein Chemokine Receptor (CCR5)  
HDGNR10 and human  
anti-Human G-protein Chemokine Receptor (CCR5)  
HDGNR10 antibodies. The  
invention further relates to diagnostic and therapeutic methods  
useful  
for diagnosing and treating diseases, disorders, and/or conditions  
related to this novel human protein and these novel human  
antibodies.

L3 ANSWER 29 OF 30 USPTFULL  
AN 2001:126108 USPTFULL  
TI Eosinophil eotaxin receptor  
IN Daugherty, Bruce L., South Orange, NJ, United States  
Demartino, Julie A., Cranford, NJ, United States  
Siciliano, Salvatore J., East Brunswick, NJ, United States  
Springer, Martin S., Westfield, NJ, United States  
PA Merck & Co., Inc., Rahway, NJ, United States (U.S.  
corporation)  
PI US 6271347 B1 20010807  
AI US 1997-847296 19970424 (8)  
PRAI US 1996-17113P 19960426 (60)  
US 1996-16158P 19960426 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Mertz, Prema  
LREP Thies, J. Eric, Rose, David L.  
CLMN Number of Claims: 4  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1091  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The eosinophil eotaxin receptor has been isolated, cloned and  
sequenced.  
This receptor is a human .beta.-chemokine receptor and has been  
designated "CC CKR3". The eosinophil eotaxin receptor may be  
used to  
screen and identify compounds that bind to the eosinophil  
eotaxin  
receptor. Such compounds would be useful in the treatment and  
prevention  
of atopic conditions including allergic rhinitis, dermatitis,  
conjunctivitis, and particularly bronchial asthma.

L3 ANSWER 30 OF 30 USPTFULL  
AN 2000:146110 USPTFULL  
TI Method of detecting or identifying ligands, inhibitors or  
promoters of  
CXC chemokine receptor 3  
IN Loetscher, Marcel, Koeniz, Switzerland  
Moser, Bernhard, Stettlen, Switzerland  
PA Theodor-Kocher Institute, Bern, Switzerland (non-U.S.  
corporation)  
PI US 6140064 20001031  
AI US 1996-709838 19960910 (8)  
DT Utility

FS    Granted

EXNAM   Primary Examiner: Mertz, Prema; Assistant Examiner:  
Murphy, Joseph F.

LREP   Hamilton, Brook, Smith & Reynolds, P.C.

CLMN   Number of Claims: 88

ECL   Exemplary Claim: 1

DRWN   7 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 2876

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB    The present invention relates to methods of identifying ligands,  
and

         inhibitors (e.g., antagonists) or promoters (e.g., agonists) of  
receptor

         function, including methods in which host cells comprising a  
nucleic

         acid encoding a CXCR3 or variant thereof are used in an assay  
to

         identify and assess the efficacy of ligands, inhibitors or  
promoters.

         Inhibitors and promoters of receptor function can be used to  
modulate

         receptor activity, permitting selective inhibition of lymphocyte  
function, particularly of effector cells such as activated T

lymphocytes

         and NK cells for therapeutic purposes.